## Prepared Remarks of FCC Chairman Julius Genachowski

## **National Rural Education Technology Summit**

## National Museum of the American Indian Washington, D.C. July 21, 2010

Thank you Secretary Duncan for convening today's forum and for being a great friend of rural America and the FCC – particularly during the development of our National Broadband Plan.

Thank you Dr. Clough for your leadership and for hosting us in this wonderful Smithsonian building.

We released the National Broadband plan in March, and we have been moving forward with implementing it ever since, such as last week's actions to extend connectivity to rural health clinics and hospitals that now have no or inadequate service.

The National Broadband Plan is unique in many respects. For example, Congress directed us to develop recommendations not only for the FCC, but for other agencies.

I was a bit uncertain about how receptive others would be to our *friendly* advice.

But I've been overwhelmed by the positive response we've gotten from other agencies such as the Departments of Commerce, Energy, Health and Human Services, Agriculture, the Small Business Administration and the Food and Drug Administration, which are each acting on the plan's recommendations.

I was of course also pleased when the President recently included our spectrum proposals as part of the administration's new Wireless Broadband Initiative to free up spectrum, promote U.S. global leadership in mobile, and drive our national competitiveness, real investment, and job creation all over America.

None of our partners has been more helpful or enthusiastic than the Department of Education. I couldn't be more pleased with today's announcement that the Department of Education is moving forward with the implementation of the Broadband Plan's recommendation to create a National Learning Registry.

No area has greater potential to transform the lives of our children than education, and no technological innovation in our lifetime has greater potential to transform education than broadband Internet—all toward President Obama's goal of leading the world in college graduates by 2020.

## With broadband:

o Any school library can become a portal to more information than the Library of Congress.

- o Children living in the most isolated rural communities can have access in their classrooms to the most talented teachers.
- Outdated textbooks can be replaced by e-readers and ever-updating digital tools, all in the goal of motivating, engaging and educating our students and preparing them to be successful participants in a 21<sup>st</sup> century economy and democracy.

By conquering the barriers of distance, the potential of the Internet is particularly significant for rural America.

Think of the 15-year-old student in West Virginia, who recently discovered a rare type of star using data from a national observatory. She was able to do so only because her school had a broadband connection.

Unfortunately, too many rural Americans find themselves on the wrong side of a digital divide.

Only 50% of rural Americans have broadband in the home, compared to the 65% percent adoption rate for all Americans. That compares to about 90% in Singapore, for example. Now, the 65% rate is too low. The broadband adoption rate in rural America is beyond unacceptable.

We gather in a building that celebrates the great culture of Native Americans. In Indian Country today, our best estimates put the adoption rate in the range of 10 percent.

Rather than closing the opportunity gap in America, high-speed Internet has the potential to exacerbate it if we don't make broadband available to all Americans.

While some say otherwise, we are not where we need to be as a nation when it comes to broadband—not for individuals, not for small businesses, not for jobs and investment, not for schools and students.

At the FCC, we've been working for some time to harness the opportunities of the Internet for education for all Americans.

Led by Senators Jay Rockefeller and Olympia Snowe and Representative Ed Markey, the U.S. Congress created and the FCC implemented our E-Rate program, which provides discounts for schools and libraries to obtain affordable Internet access.

When E-Rate was established in 1996, 14% of U.S. classrooms were connected to the Internet.

Within three years of E-Rate's creation, 63% of classrooms were connected.

Today, 94% of classrooms have at least some Internet access, and virtually all schools are online.

E-Rate is a good example of what can happen when our government has a plan – and the FCC just issued our most ambitious plan ever – our National Broadband Plan

The Plan is a bold strategy to promote private investment and build a world-class broadband infrastructure that unleashes innovation and brings the benefits of high-speed Internet to all Americans.

Achieving the Plan's goals will drive U.S. economic success, global competitiveness, a vibrant 21<sup>st</sup> century democracy, and solutions to major national challenges.

One of those challenges is education.

The Plan identifies three key areas of concern when it comes to seizing the opportunities of broadband for education: infrastructure, training, and content.

Let's start with infrastructure. We have to get broadband to all classrooms everywhere. How are we going to do that?

I just mentioned how almost all schools are connected. Problem solved. Right?

Well, not all connections are created equal. Most rural schools have connections up to only 1.5 megabits per second – too slow to meet the bandwidth demands of many of today's applications, much less tomorrow's.

That's why the plan proposes taking E-Rate to the next level. E-Rate 2.0 will provide resources to help schools get faster speeds.

It will also add wireless to the mix. There was a story in the paper yesterday about how e-Book sales have surpassed hardcovers on Amazon.

The lead in the New York Times gets it right: "Monday was a day for the history books: if those will even exist in the future."

E-readers provide extraordinary opportunities for students and teachers. If schools want to support learning on the mobile tools of tomorrow, E-Rate should support them.

We are also in the process of simplifying the application process and giving schools greater flexibility to use E-Rate supported programs to serve their communities.

Next, training.

Digital literacy is one of the major general challenges for broadband adoption; it should be no surprise that we must tackle the issue for teachers as well.

So the plan calls for grants as part of an overall strategy to help schools train teachers in digital literacy and digital skills for learners of all ages.

Finally, the subject of today's announcement: content.

There's plenty of great educational content out there – the problem is, there's also some stuff that's not so great; and what's out there is in a variety of formats that are not interoperable or compatible with a teacher's content-management system.

Then you have licensing issues that limit some content's usefulness.

Much of this great content is created by federal agencies. The Broadband Plan proposed that the Education Department take the lead in setting standards to make our government's extensive cultural and educational resources easily available in one place, in a compatible format. Today, the Department of Education is moving forward with the implementation of this recommendation by creating the Learning Registry.

The Learning Registry will put a library of world-class educational content at the fingertips of every American student and teacher.

Teachers will be able to go to one location to find easily accessible and compatible material they can use to build lessons.

Students who learn best through Internet-aided instruction could see an increase in both the quality and the usage of online teaching in their classrooms.

Innovators and entrepreneurs could also benefit from the Learning Registry.

Consider Flat World Knowledge, a small startup that assembles existing content to provide free online textbooks for college-level courses – More content, more opportunity.

Increasing the availability of online educational content will spur entrepreneurs and catalyze investment.

This is true for both commercial innovators and social innovators. Social innovators like Charles Best have created non-profit online platforms that help teachers and students every day. Best's Donors Choose is a platform to raise funds for teachers and school projects.

By making it easier to find and access digital content for learning, the Learning Registry can serve as a different kind of beneficial platform—a platform for development of new educational tools for teachers and students.

I want to thank Secretary Duncan and the Department of Education for moving aggressively on this important project to make our shared cultural treasures and learning resources available to all Americans – particularly those living in rural America.

No technological innovation in our lifetime has greater potential to transform education than broadband Internet.

Today, we move one step closer to fulfilling that potential.

Thank you.